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Appendix I

Education/Public Outreach Proposals

as Part of

Proposals to the Outer Planets Program

APPENDIX I

EDUCATION/PUBLIC OUTREACH PROPOSALS AS PART OF PROPOSALS TO THE OUTER PLANETS PROGRAM

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APPENDIX I

EDUCATION/PUBLIC OUTREACH PROPOSALS AS PART OF PROPOSALS TO THE OUTER PLANETS PROGRAM

1. Scope of Program

The Office of Space Science (OSS) has developed a comprehensive approach for making education at all levels (with a particular emphasis on K-14 education) and the enhancement of public understanding of space science integral parts of all of its missions and research programs. The two key documents that establish the basic policies and guide all OSS Education and Outreach activities are a strategic plan, entitled *Partners in Education: A Strategy for Integrating Education and Public Outreach Into NASA's Space Science Programs* (March 1995), and an implementation plan, entitled *Implementing the Office of Space Science (OSS) Education/Public Outreach Strategy* (October 1996). Both of these documents may be obtained either by selecting Education and Public Outreach from the menu on the OSS homepage at http://spacescience.nasa.gov, or from Dr. Jeffrey Rosendhal, Code S, Office of Space Science, NASA Headquarters, Washington, DC 20546-0001.

In accord with these established OSS policies, instrument investigation proposers to the Outer Planets/Solar Probe AO are <u>required</u> to include an Education/Public Outreach (E/PO) component as an integral part of their scientific research proposal. E/PO proposals will be evaluated (see criteria below) by appropriately qualified scientific, education, and outreach personnel and the results of those evaluations will be considered by the OSS Selecting Official as a part of the overall evaluation and selection process. E/PO will serve as one of the factors to be used in discriminating among proposals having otherwise comparable scientific and technical merits.

Science Team Members selected for the Europa Orbiter Mission through this AO will be expected to actively participate in a common Outer Planets/Solar Probe Education/Public Outreach program and must make provisions to do so as part of their proposals (see Section 2.6) but they do not have to submit a separate E/PO element. However, prospective Science Team members must include provisions for the costs of participating in the common E/PO effort as part of their proposed budget. Such costs may include items such as travel, planning time, level-of-effort participation in the implementation of the common program, and costs associated with the development of appropriate supporting materials.

2. Evaluation Criteria

There are two classes of evaluation criteria against which proposed E/PO activities will be evaluated. The <u>general</u> criteria to be applied to the evaluation of <u>all</u> proposals, which reflect requirements necessary for further consideration of a proposal, are:

- The quality, scope, and realism of the proposed E/PO program including the adequacy, appropriateness, and realism of the proposed budget;
- The capability and commitment of the proposer and the proposer's team and the direct involvement of one or more science team members in overseeing and carrying out the proposed E/PO program;
- The establishment or continuation of effective partnerships with institutions and/or personnel in the fields of education and/or public outreach as the basis for and an integral element of the proposed E/PO program; and
- The adequacy of plans for evaluating the effectiveness and impact of the proposed education/outreach activity.

To ensure that the goals and objectives of the OSS E/PO strategy are realized in practice, proposals will also be evaluated using the following specific criteria. Based on the funding guidelines given in Section 2.6 of the AO and in Section 3 of the appropriate Mission and Project Description appendix, the E/PO elements of proposals submitted in response to this announcement may involve the expenditure of substantial resources. Therefore, it is expected that proposed programs will have a breadth and depth commensurate with these resources. Such programs are expected to be multi-faceted in nature, address a number of different aspects of education and outreach contained in the specific criteria, and have state, regional or national scope. The specific criteria are:

- For proposals dealing directly with or strongly affecting the formal education system (e.g., through teacher workshops or student programs carried out at informal education institutions such as science museums and planetariums), the degree to which the proposed E/PO effort is aligned with and linked to nationally recognized and endorsed education reform efforts and/or reform efforts at the state or local levels;
- The degree to which the proposed E/PO effort contributes to the training of, involvement in, and broad understanding of science and technology by underserved and/or underutilized groups; and
- The potential for the proposed E/PO activity to expand its scope by having an impact beyond the direct beneficiaries, reaching large audiences, being suitable for replication or broad dissemination, or drawing on resources beyond those directly requested in the proposal.

Although creativity and innovation are certainly encouraged, note that neither of these sets of criteria focuses on the originality of the proposed effort. Instead, NASA seeks assurance that the proposer is personally committed to the E/PO effort and the PI and/or appropriate research team members will actively be involved in carrying out a meaningful, effective, credible, and appropriate E/PO activity; that such an activity has been planned and will be executed; and that the proposed investment of resources will make a significant contribution toward meeting OSS E/PO plans and objectives.

To aid proposers in the preparation of their proposals, as well as to ensure that reviews are carried out on a consistent basis aligned with the OSS Education Strategy and Implementation Plan, an "Explanatory Guide" to the E/PO evaluation criteria has been prepared and may be found by linking through *Education and Public Outreach* at Internet URL http://spacescience.nasa.gov.

3. Assistance for the Preparation of E/PO Proposals

NASA OSS has established a nation-wide infrastructure of space science education/outreach groups whose purpose is to directly aid space science investigators in identifying and developing high quality E/PO opportunities. This infrastructure provides the coordination, background, and linkages for fostering partnerships between the space science and E/PO communities, and the services needed to establish and maintain a vital national, coordinated, long-term OSS E/PO program. Of particular interest to proposers to this AO are two elements of this system (which are also described in more detail in the OSS education/outreach implementation plan referred to in Section 1 above):

- Four OSS science theme-oriented E/PO "Forums" to help orchestrate and organize in a comprehensive way the education/outreach aspects of OSS space science missions and research programs, and provide both the space science and education communities with ready access to relevant E/PO programs and products; and
- Five regional E/PO "Broker/Facilitators" to search out and establish high leverage opportunities, arrange alliances between educators and OSS-supported scientists, and help scientists turn results from space science missions and programs into educationally-appropriate activities suitable for regional and/or national dissemination

Prospective proposers are strongly encouraged to make use of these groups to help identify suitable E/PO opportunities and arrange appropriate alliances. Proposers should be careful to note that these Forums and Broker/Facilitators have been established to provide help, but the responsibility for actually developing the E/PO program and writing the proposal is that of the proposer. Points of contact and addresses for all of these E/PO Forums and Broker/Facilitators may be found by opening Education and Public Outreach from the menu of the OSS homepage at Internet URL http://spacescience.nasa.gov.

4. Preparation and Submission of an E/PO Proposal

In order to be considered for evaluation, E/PO proposals must adhere to the following formats and also <u>must be submitted both electronically and in hard copy</u> as described below.

An E/PO proposal is to consist of a contiguous body and budget:

- The body of the E/PO proposal is limited to four pages (<17,000 characters, including spaces, using the fonts and page layouts specified in the appropriate Guidelines for Proposal Preparation appendix) and must include the following parts: a brief abstract of the proposed activity (not to exceed 800 characters); an expanded description of the E/PO objectives and planned activities; a description of the intended involvement of the Principal Investigator and/or key science team members in the proposed E/PO effort; a description of any educational personnel who are involved in the effort, including proposed partnership institutions (together with specific indicators of commitment on the part of partners where appropriate); a description of how the effort will be managed; and a brief explanation of the requested E/PO budget. Note that the PI or one of the science team members of the parent research proposal must have the prime responsibility for overseeing the implementation of the proposed E/PO activity. The responsible individual should be clearly identified in the body of the E/PO proposal.
- The period of performance of an E/PO activity is generally expected to coincide with that of the instrument investigation proposal throughout all phases of the investigation including the data analysis phase. The E/PO budget must be summarized for its entire intended total period of performance, as well as for each individual year thereof, using the format entitled Budget Summary for Education/Public Outreach Proposals given at the end of this program element (e.g., an E/PO effort proposed for a ten year period of performance will require eleven budget sheets). In addition, this E/PO budget must be integrated into the budget of the parent instrument investigation proposal.
- Instrument proposers should use the guideline of allocating 1-2% of their investigation budget for their E/PO program. This budget should also contain provisions for the costs of coordinating/integrating their individual effort with the common Outer Planets/Solar Probe E/PO program, which may include such items as travel, planning time, and the development of appropriate supporting materials.

E/PO proposals (both body and budget) <u>must</u> be submitted by each of two separate ways:

• As an electronic submission (for the evaluation process) by uploading it, including its Budget Summary sheets, to the secure Web site http://cass.jsc.nasa.gov/panel/, which provides instructions for this activity using a wide variety of formats. In accordance with the size limits specified above, the peer evaluations will consider only the first 800 characters submitted for the E/PO abstract and 17,000 characters for its body. Proposers without Web access or who experience difficulty in using this site may request assistance from the Lunar and Planetary Institute by E-mail at panel@lpi.jsc.nasa.gov or by phone at (281) 486-2136; and

• As part of the total hard-copy version of the research proposal (see the ordered list of component parts for proposals in the appropriate Guidelines for Proposal Preparation appendix).

5. Additional Information

As indicated in Section 2.6, in addition to the individual E/PO programs to be planned and implemented by selected instrument investigators, all selected investigators will be expected to participate in a common Outer Planets/Solar Probe Education/Public Outreach program to be carried out by the Outer Planets/Solar Probe Project. Individual instrument investigator E/PO efforts will be coordinated with and integrated into a master Education/Public Outreach plan to be developed following selection. Questions about the Outer Planets/Solar Probe E/PO program may be directed to:

Mr. Richard Shope, Education & Outreach Coordinator
Outer Planets/Solar Probe Project

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Outer Planets/Solar Probe E/PO web site: http://www.jpl.nasa.gov/ice-fire/outreach/.